

Work Order ID 150594***150594***

Page 1

Monday, August 29, 2016 2:44:31 PM

Item ID: 646.3812

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Gusset Bracket

Start Date: 8/8/2016

Start Qty: 5.00

5

Cust Item ID:

Required Date: 8/29/2016

Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date:

AUG 31 2016

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

646.3800

NC

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.26

HAAS CNC vertical machine #1

1-Machine per DWG
DWG REV: N/C

2- deburr and break all sharp edges

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.01

Quality Control

DAS
32
9-89

16-10-06

DAS
32
9-89

16-10-06

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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OTHER : _____																																																																					

Monday, August 29, 2016 2:44:32 PM

150594

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Gusset Bracket

Start Date: 8/8/2016 **Start Qty:** 5.00 ***5***

Cust Item ID:

Required Date: 8/29/2016 **Req'd Qty:** 5.00 ***5***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NB2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130 QC8- Inspect parts - second check

0.00

130

OC

Memo

0.02

Quality Control

DAS
14
9.29

16/10/06

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

140

Outsource4

Memo

149.99

Outsource process - Anodize

Issue P/O to ATG : 339/6

1- Black Anodize as per Dwg 646.3800

2- PRIME AS PER DWG, SEE NOTE #2

Certification of Comformity is required

DA:
13
9-89

OCT 12 2016

150

Receive & Inspect for Damage & Mat'l Certs

0.00

150

Packaging

Memo

0.02

Packaging

10x Spille-1031

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Monday, August 29, 2016 2:44:32 PM

Page 3

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 8/8/2016 **Start Qty:** 5.00 ***5***

Cust Item ID:

Required Date: 8/29/2016 **Req'd Qty:** 5.00 ***5***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

[illegible]

180 Identify as per dwg & Stock Location CUK100 0.00

180 10 **DAS**
6

Packaging **Memo** 0.01 9-89

Packaging ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV*** **NOV 01 2016**

190 *190* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.08		NOV 02 2016
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DAS
21
9-89

NOV 01 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Monday, August 29, 2016 2:44:31 PM

Page 1
4

Work Order ID: 150594

150594

Parent Item: 646.3812

646.3812

Parent Item Name: Gusset Bracket

Start Date: 8/8/2016

Required Date: 8/29/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A NEW ISSUE 12-10-22 JLM VERIFIED:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6A0.75X0.75X 0.060X0.062		Purchased	No				f	69.1323		0.5			DAS

***M7075T6A0 75X0 75X0 060X0**

16-10-07

32
9-89

7075T6 ANGLE .75" X .75" X .060" X .062"W

Location

Loc Qty

Loc Code

MAT051

69.132342

123947

69.132342

1.8281

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
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Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03697				SHEET 1 OF 1	
	DWG NO. 646.3800	REV: N/C	PREPARED BY B. PETERS	DATE: 11/14/12	EFFECT ON DWG ☐ INC. ☒ UNINC.	
	DWG TITLE: BRACKETS					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: ADDED ALTERNATE MATERIAL.				ECR: D-12-006	

IS

1 PRIMARY MATERIAL: 7075-T651 ALUMINUM PER AMS-QQ-A-250/12.
ALTERNATE MATERIAL: 7075-T6511 ALUMINUM PER AMS-QQ-A-200/11.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
150594 MJS
160831

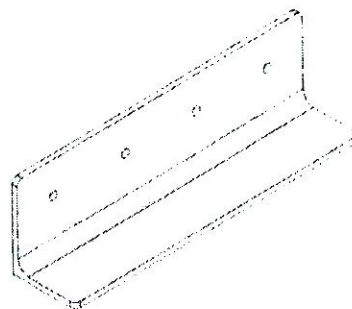
SHEET 1, ZONE A2 IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED
☐ RFMS ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☐ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO

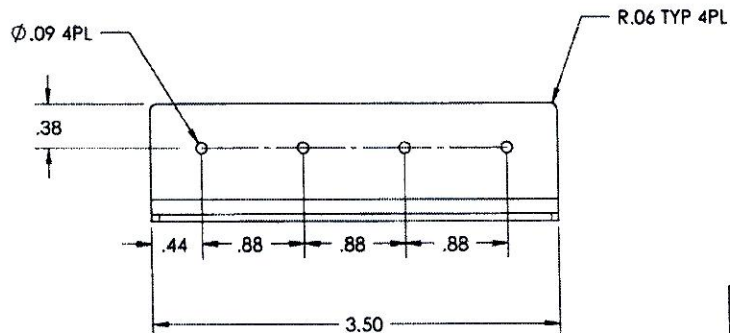
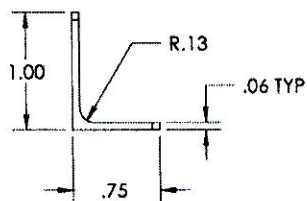
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120



646.3810



UNINCORPORATED E.L. (S)

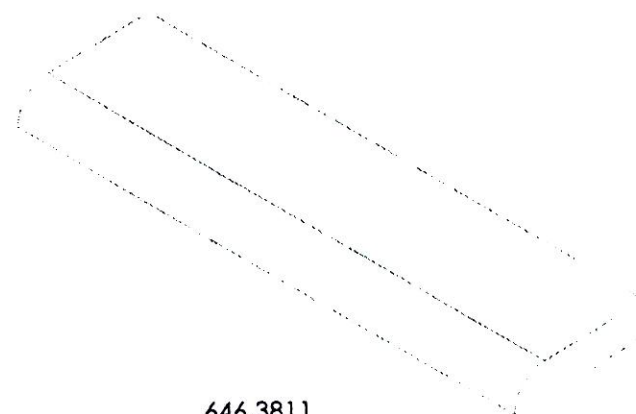
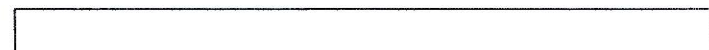
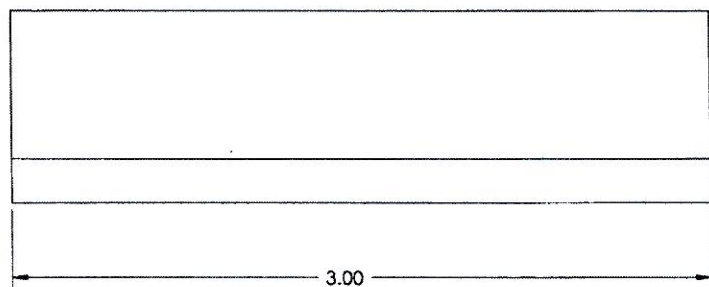
036097

		646.3814	WIPER BRACKET	▲	▲
		646.3813	STRUT BRACKET	▲	▲
		646.3812	GUSSET BRACKET	▲	▲
		646.3811	RADIUS BLOCK	▲	▲
		646.3810	BRACKET	▲	▲
	QTY	FIND #	PART #	DESCRIPTION	MATL SPEC.
QTY					
PARTS LIST					
NEXT ASSY IS:			APICAL INDUSTRIES		
646.4000			2608 TEMPLE HEIGHTS DR.		
			OCEANSIDE, CA 92056-3512 (760) 724-5300		
ORIGINAL DATE 03-15-06			BRACKETS		
DRAWN BY: CHAMBER			REV: N/C		
CHECKED BY: P. BRAVO			646.3800		
DRAWING APPROVAL: P. BRAVO 03/15/06			SHEET 1 OF 5		
CONTRACT NO.			SCALE NONE		
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES			TOL: 2 PLACE DECIMALS ±.005		
TOLERANCES ARE: 2 PLACE DECIMALS ±.005			3 PLACE DECIMALS ±.003		
ANGLES ±.5°					

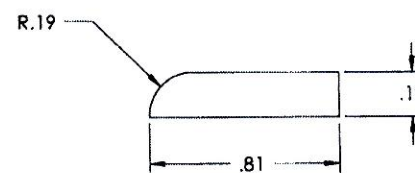
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REV	DESCRIPTION	DATE	APPROVED

A
B
C
D

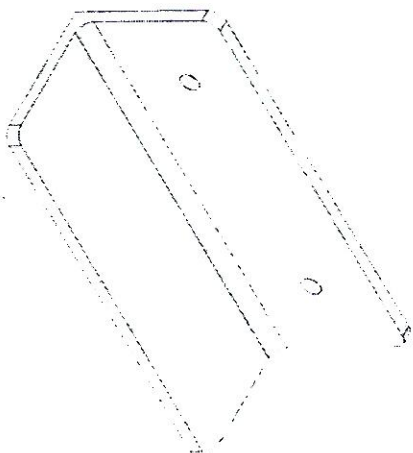
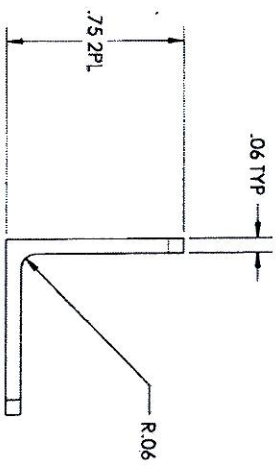
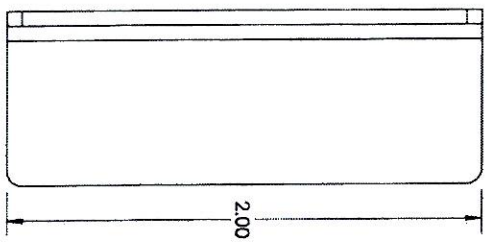


646.3811



NEXT ASSY (S)	ORIGINAL DATE	08-19-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	REV	N/C
	DRAWN BY	J. GARDNER			
	CHECKED				
	DRAWING APPROVAL				
	CONTRACT NO.		PART CODE 646.3800	DWG NO.	SHEET 2 OF 5
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ± .010 ANGLES ± .5°				
	SCALE	NONE			

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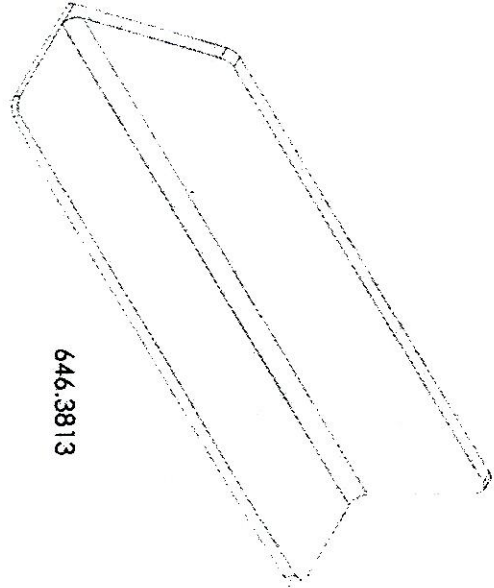
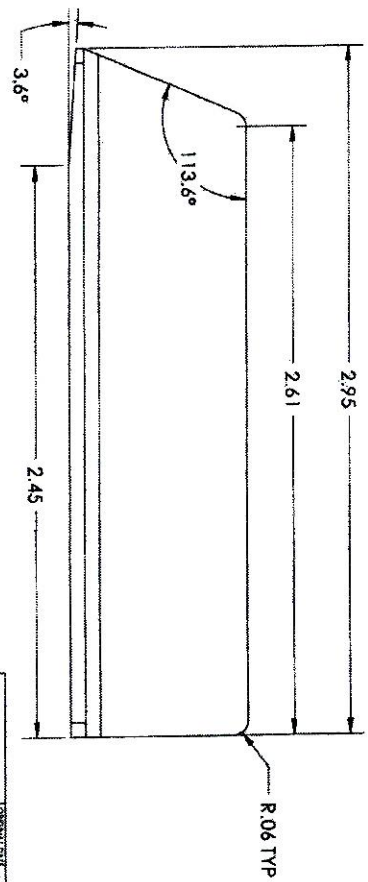
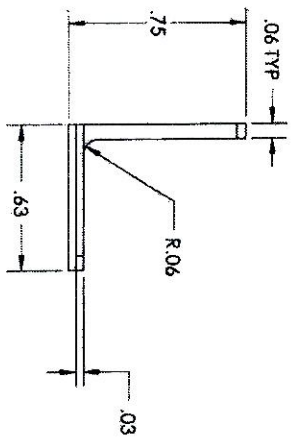
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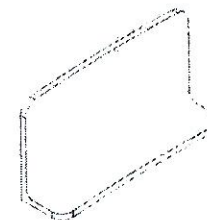
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REV	DESCRIPTION	DATE	APPROVED

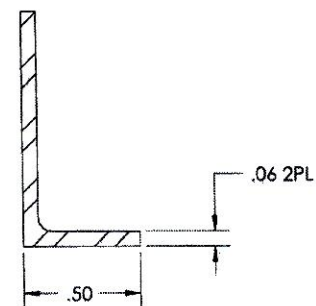
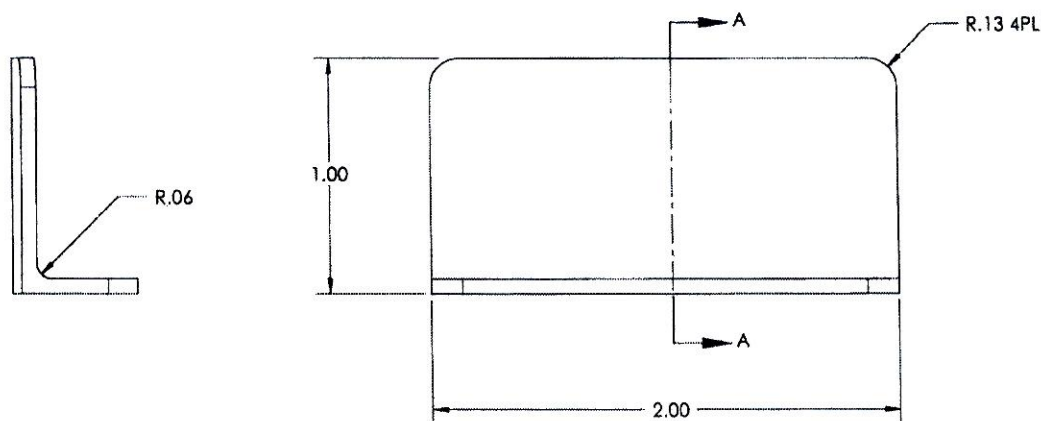
NEXT ASSY IS DRAWN BY CHECKED BY DESIGNED BY DATE 06/19/00	PREPARED BY DATE 06/19/00
APICAL INDUSTRIES 2408 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
BRACKETS	
Dwg No. 646.3800 Scale NONE	SHEET 4 OF 5

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REV	DESCRIPTION	DATE	APPROVED



646.3814



SECTION A-A

NEXT ASSY IS	ORIGINAL DATE	08-16-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300				
	IND-DRAWN	CHECKER					
	DRAWN BY	J. GARDNER					
	DATE	08-16-08					
	CONTRACT # 155		BRACKETS				
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACES DECIMALS ±.015 ANGLES ±.5°						
		SRT	CAGE CODE	QWTS	163	646.3800	PI7
		B		07/26/62			N/C
		SCALE NONE					SHEET 5 OF 5



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33916**

Purchase Order Date 10/12/2016

PO Print Date 10/19/2016

Page Number 5 of 7

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 613-446-4544

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

13	150594	DAS 38 9-89	646.3812 GUSSET BRACKET REV. N/C	10/28/2016	10.00	\$6.10	\$61.00
				Yes			
				10/28/2016			

8/16-10-31

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

Line Total: \$61.00

14	150268		646.9811 UPPER DEFLECTOR REV. A	10/28/2016	6.00	\$32.60	\$195.60
				Yes			
				10/28/2016			

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

Line Total: \$195.60

15	151372		647.0116 DOUBLER REV. A	10/28/2016	12.00	\$7.40	\$88.80
				Yes			
				10/28/2016			

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

Line Total: \$88.80

Note:

10/19/2016



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 912462

Date: 28-Oct-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

h: 613 632-9577		Fax: 613 632-1000	
Terms		Ship Via	
Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
20 ea	Part: D2348 Wearplate Anodize, Type II, Class 2 (MIL-A-8625) Job: 20278	Rev: C PO: 33916	Line: 1
10 ea	Part: 646.3717 Doubler Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20287	Rev: A PO: 33916	Line: 10
12 ea	Part: 646.3718 custom washer Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20288	Rev: A PO: 33916	Line: 11
10 ea	Part: 646.3719 Doubler Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20289	Rev: A PO: 33916	Line: 12
10 ea	Part: 646.3812 Gusset bracket Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20290	Rev: N/C PO: 33916	Line: 13
6 ea	Part: 646.9811 Upper deflector	Rev: A	



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 912462

Date: 28-Oct-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
ea	Gusset Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20285 PO: 33916 Line: 8		
12 ea	Part: 646.3715 Rev: A Strur doubler Hard Anodize, Type III, Class 2 (MIL-A-8625) Primer, MIL-P-23377J, TYPE 1, CLASS N Job: 20286 PO: 33916 Line: 9		
DATE: <u>28/10/16</u>			
CERTIFIED SIGNATURE: <u>[Signature]</u>			
RECEIVER SIGNATURE: <u>50/16-10-31</u>			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
CERTIFICATE OF CONFORMANCE			
A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO REQUIREMENTS.			
MADE IN CANADA.			
DAS 38 9-89			